

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOIL when  $A \neq 1$  SLTN (version 117)**

**FOIL the expressions shown below:**

1.  $(4x + 7)(-7x + 7)$

$$\begin{aligned} & (4)(-7)x^2 + (4)(7)x + (7)(-7)x + (7)(7) \\ & (-28)x^2 + (28)x + (-49)x + (49) \\ & -28x^2 - 21x + 49 \end{aligned}$$

2.  $(-8x - 7)(-6x - 3)$

$$\begin{aligned} & (-8)(-6)x^2 + (-8)(-3)x + (-7)(-6)x + (-7)(-3) \\ & (48)x^2 + (24)x + (42)x + (21) \\ & 48x^2 + 66x + 21 \end{aligned}$$

3.  $(-2x - 5)(5x - 9)$

$$\begin{aligned} & (-2)(5)x^2 + (-2)(-9)x + (-5)(5)x + (-5)(-9) \\ & (-10)x^2 + (18)x + (-25)x + (45) \\ & -10x^2 - 7x + 45 \end{aligned}$$

4.  $(-6x - 7)(8x - 3)$

$$\begin{aligned} & (-6)(8)x^2 + (-6)(-3)x + (-7)(8)x + (-7)(-3) \\ & (-48)x^2 + (18)x + (-56)x + (21) \\ & -48x^2 - 38x + 21 \end{aligned}$$

5.  $(-3x - 4)(2x - 5)$

$$\begin{aligned} & (-3)(2)x^2 + (-3)(-5)x + (-4)(2)x + (-4)(-5) \\ & (-6)x^2 + (15)x + (-8)x + (20) \\ & -6x^2 + 7x + 20 \end{aligned}$$

**FOIL the expressions shown below:**

6.  $(-2x + 9)(-3x + 9)$

$$\begin{aligned} &(-2)(-3)x^2 + (-2)(9)x + (9)(-3)x + (9)(9) \\ &(6)x^2 + (-18)x + (-27)x + (81) \\ &6x^2 - 45x + 81 \end{aligned}$$

7.  $(4x - 3)(4x + 2)$

$$\begin{aligned} &(4)(4)x^2 + (4)(2)x + (-3)(4)x + (-3)(2) \\ &(16)x^2 + (8)x + (-12)x + (-6) \\ &16x^2 - 4x - 6 \end{aligned}$$

8.  $(2x - 5)(2x + 6)$

$$\begin{aligned} &(2)(2)x^2 + (2)(6)x + (-5)(2)x + (-5)(6) \\ &(4)x^2 + (12)x + (-10)x + (-30) \\ &4x^2 + 2x - 30 \end{aligned}$$

9.  $(6x - 7)(-5x + 7)$

$$\begin{aligned} &(6)(-5)x^2 + (6)(7)x + (-7)(-5)x + (-7)(7) \\ &(-30)x^2 + (42)x + (35)x + (-49) \\ &-30x^2 + 77x - 49 \end{aligned}$$

10.  $(5x - 7)(-6x - 6)$

$$\begin{aligned} &(5)(-6)x^2 + (5)(-6)x + (-7)(-6)x + (-7)(-6) \\ &(-30)x^2 + (-30)x + (42)x + (42) \\ &-30x^2 + 12x + 42 \end{aligned}$$